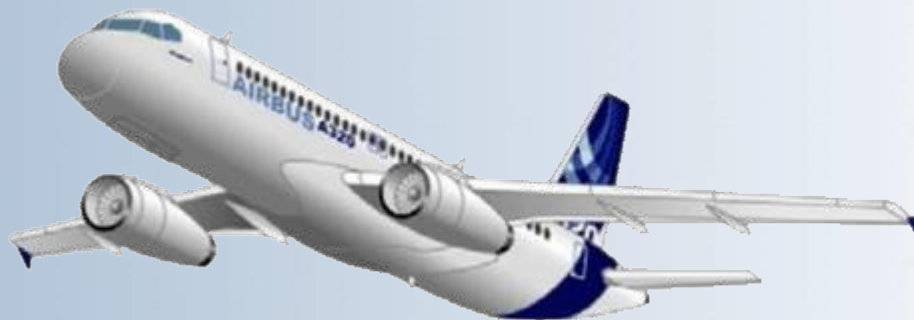


Airbus A318/A319/A320/A321 CFM-56

CFM56-5B

Component Identification

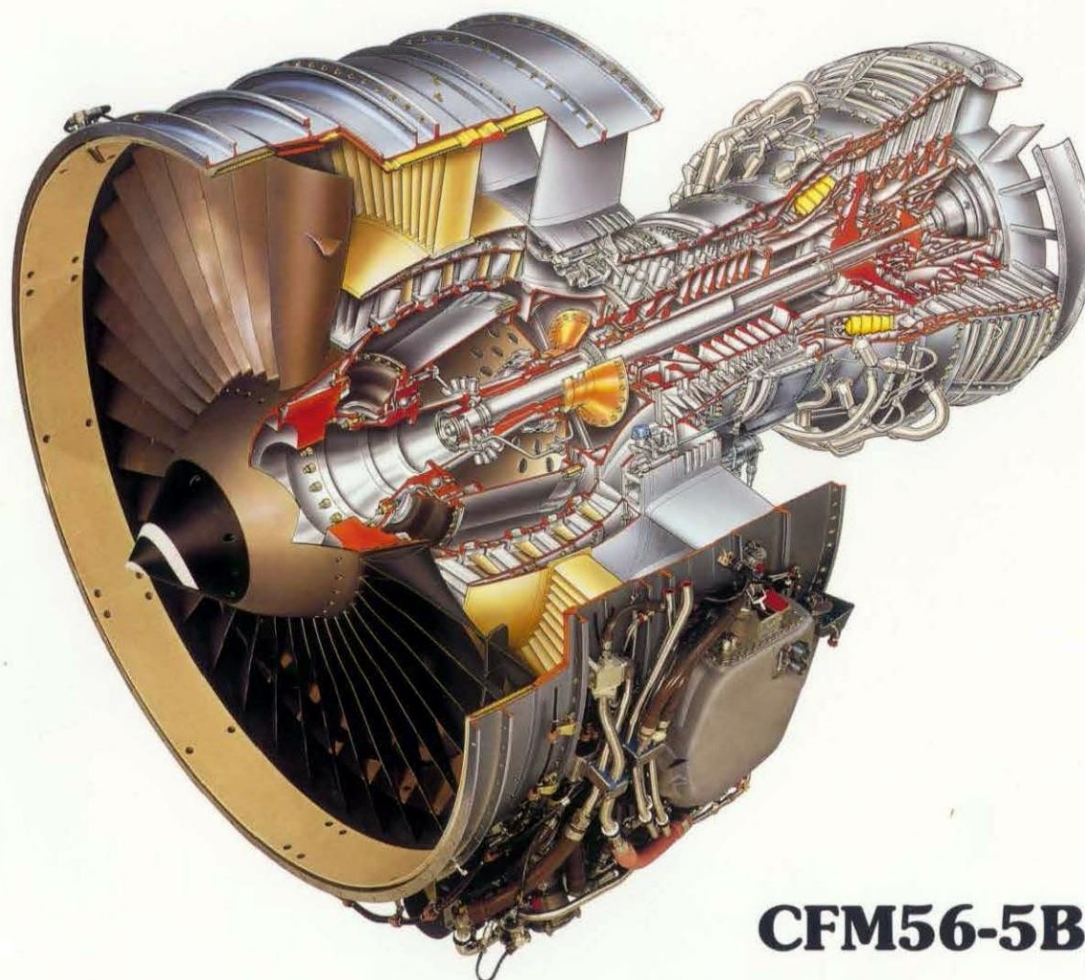


UNCLASSIFIED

(A318/A319/A320/A321)



THE POWER
OF FLIGHT



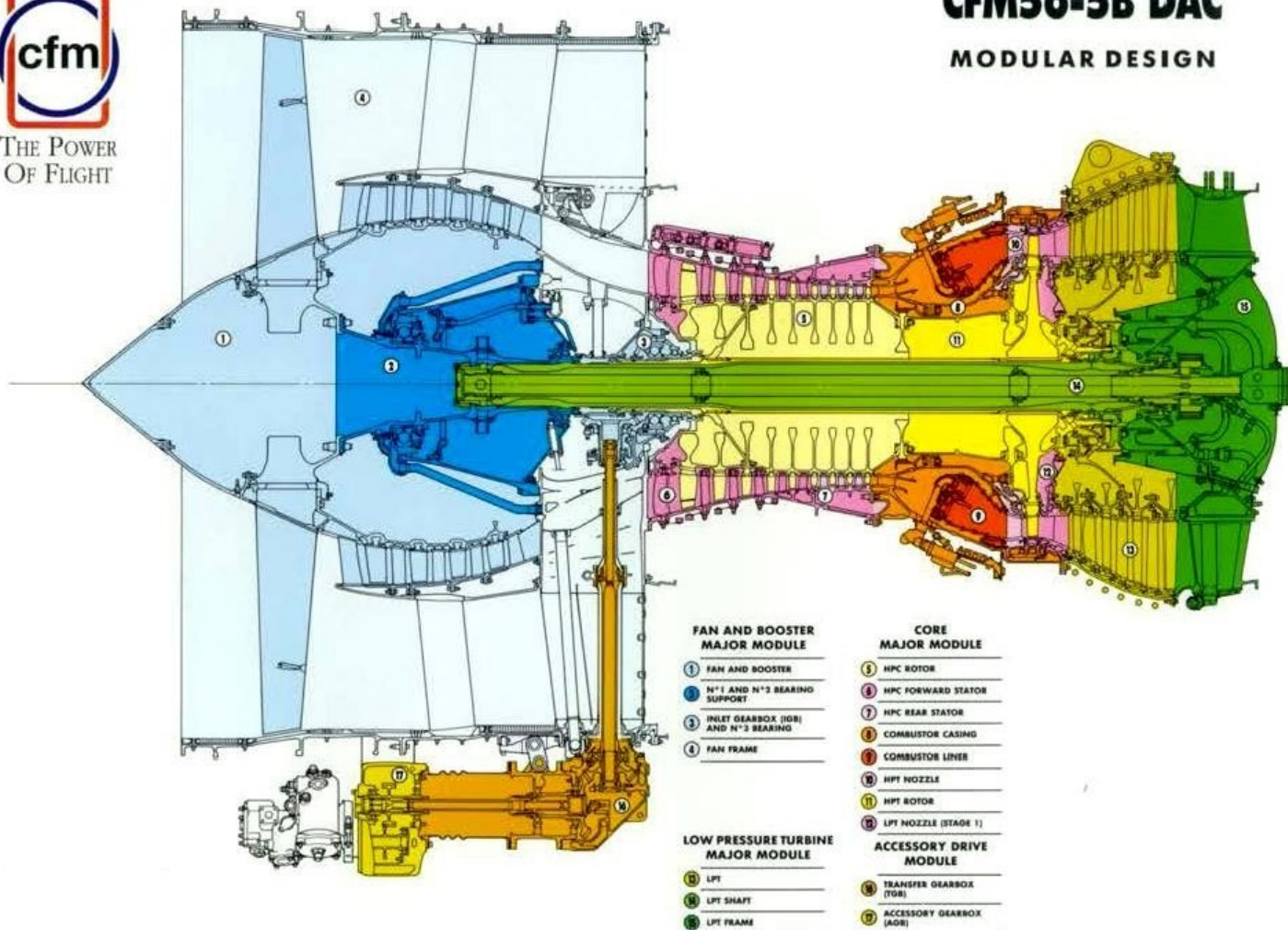
CFM56-5B

CFM56-5B MODULES

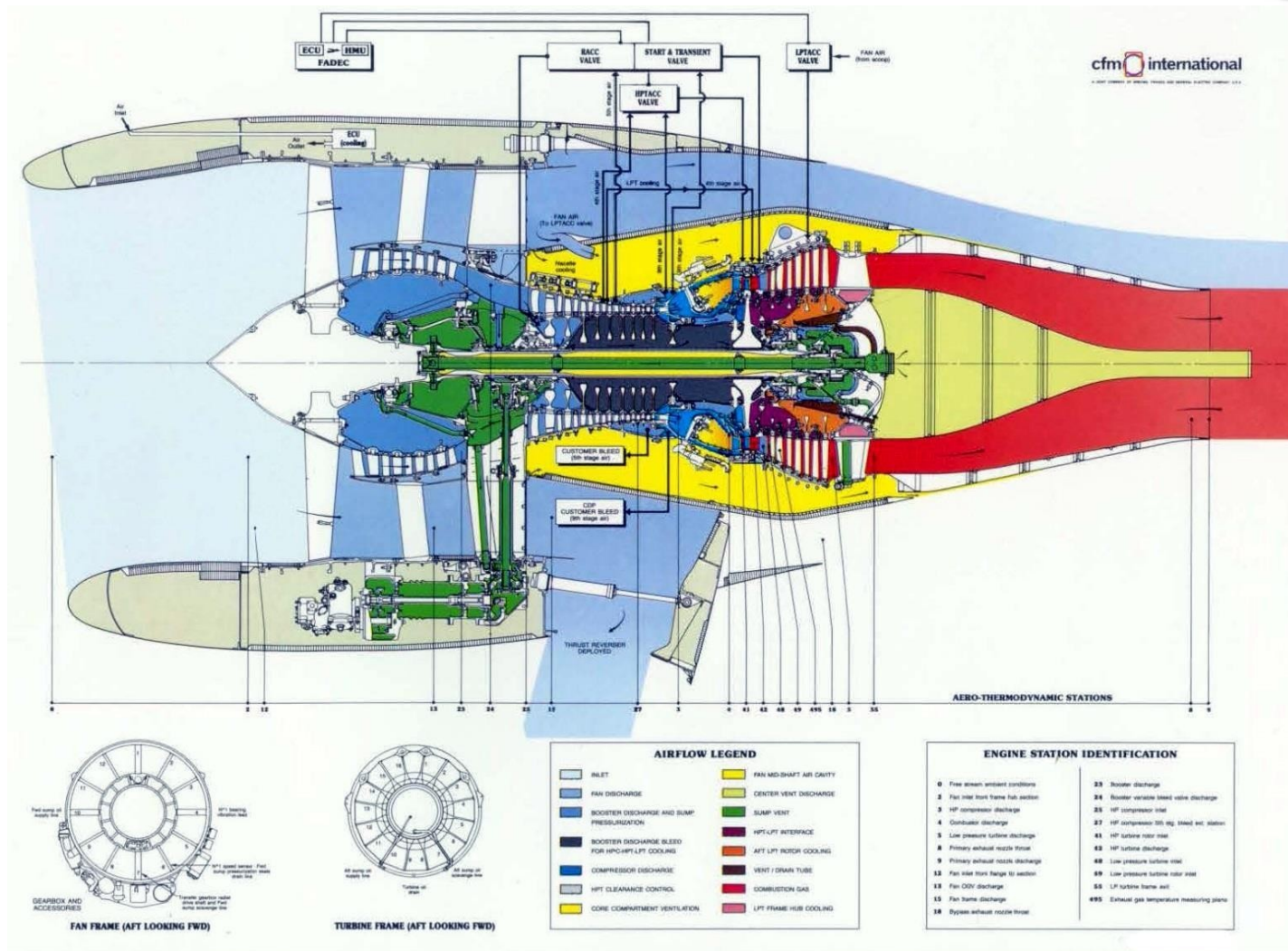


THE POWER
OF FLIGHT

CFM56-5B DAC MODULAR DESIGN



CFM56-5B ENGINE AIR FLOW



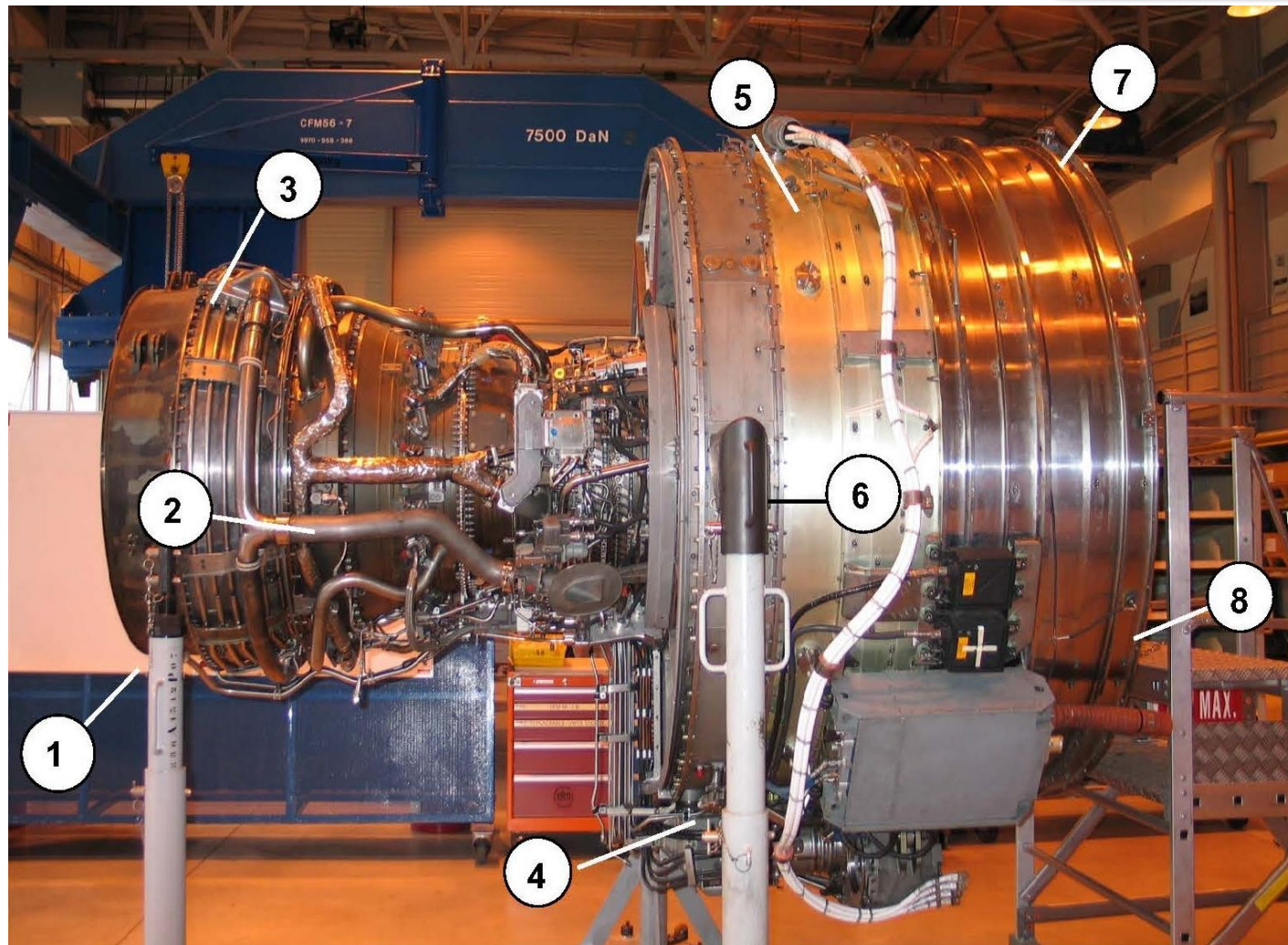
CFM56-5B ENGINE PRESENTATION



ENGINE RIGHT SIDE



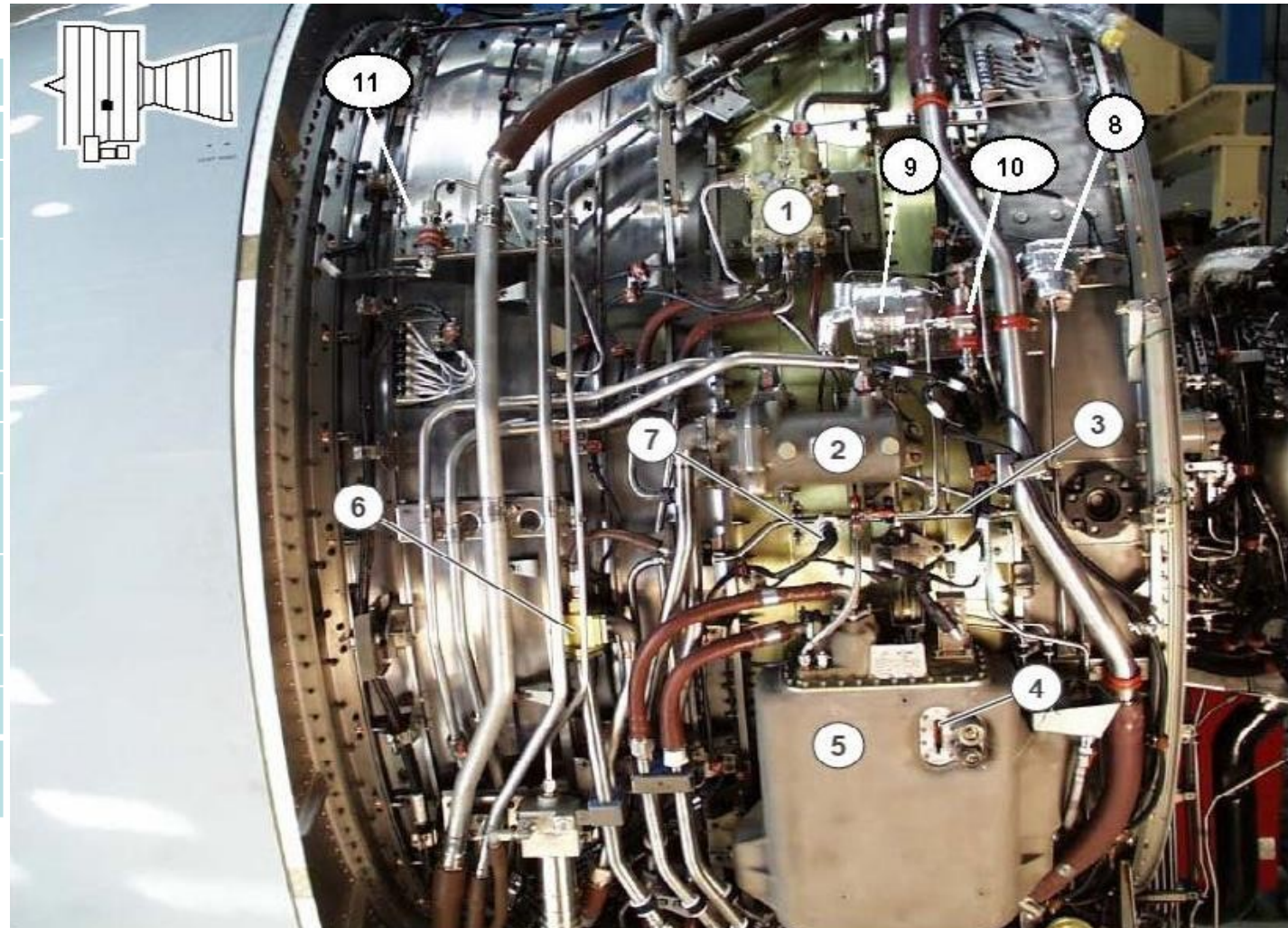
No.	Component
1	T5 sensor
2	T Case sensor
3	Rear vibration sensor
4	N1 sensor
5	P13 sensor
6	Front vibration sensor connector
7	T12 sensor
8	P12 sensor



FAN COWL LEFT SIDE



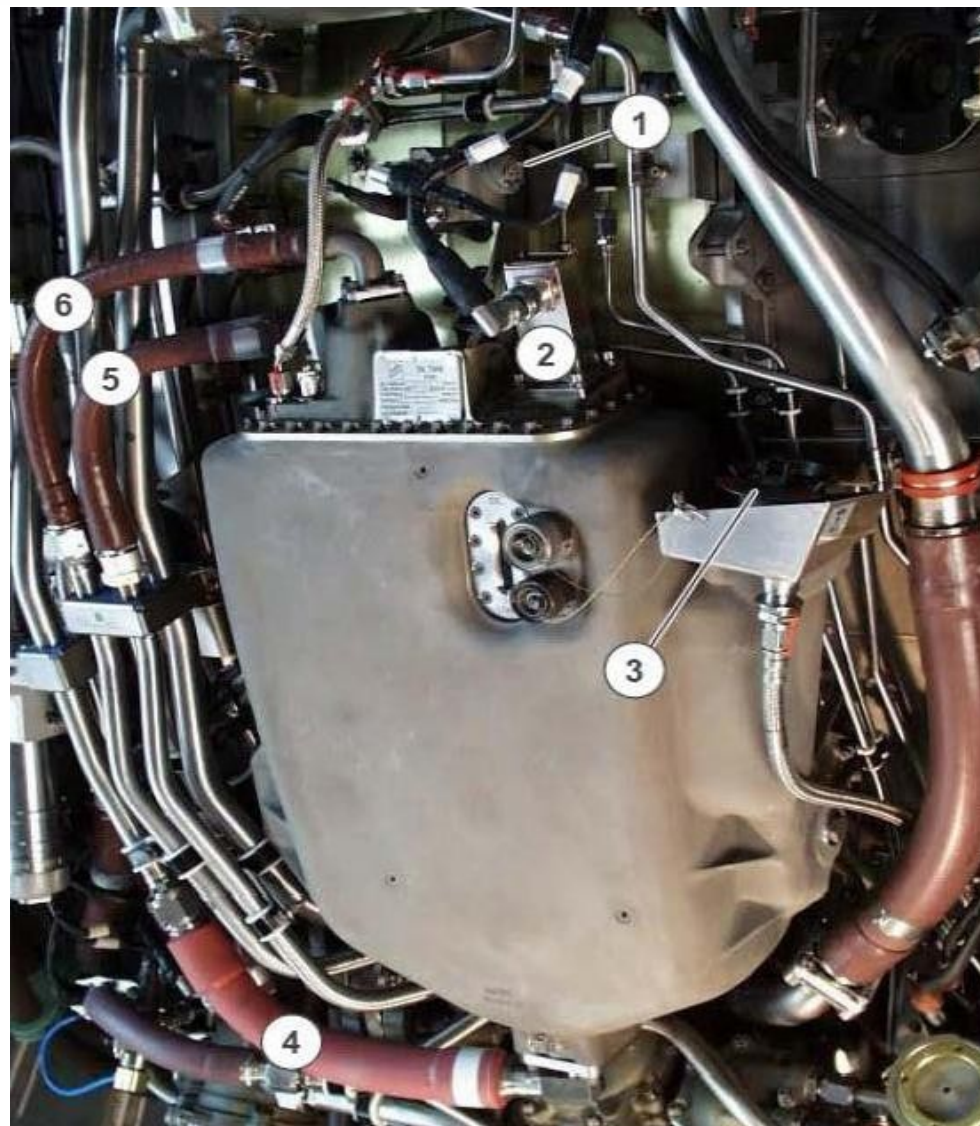
No.	Component
1	Fuel Return valve (FRV)
2	Integrated Drive Generator (IDG) oil cooler
3	Forward sump oil supply line
4	Sight gauge
5	Oil tank
6	Oil tank anti-siphon device
7	ECU oil temperature sensor (FRV)
8	Fuel filter ΔP pressure switch
9	Oil low pressure switch
10	Oil pressure transmitter
11	EDP hydraulic low pressure switch



ENGINE OIL SYSTEM COMPONENTS



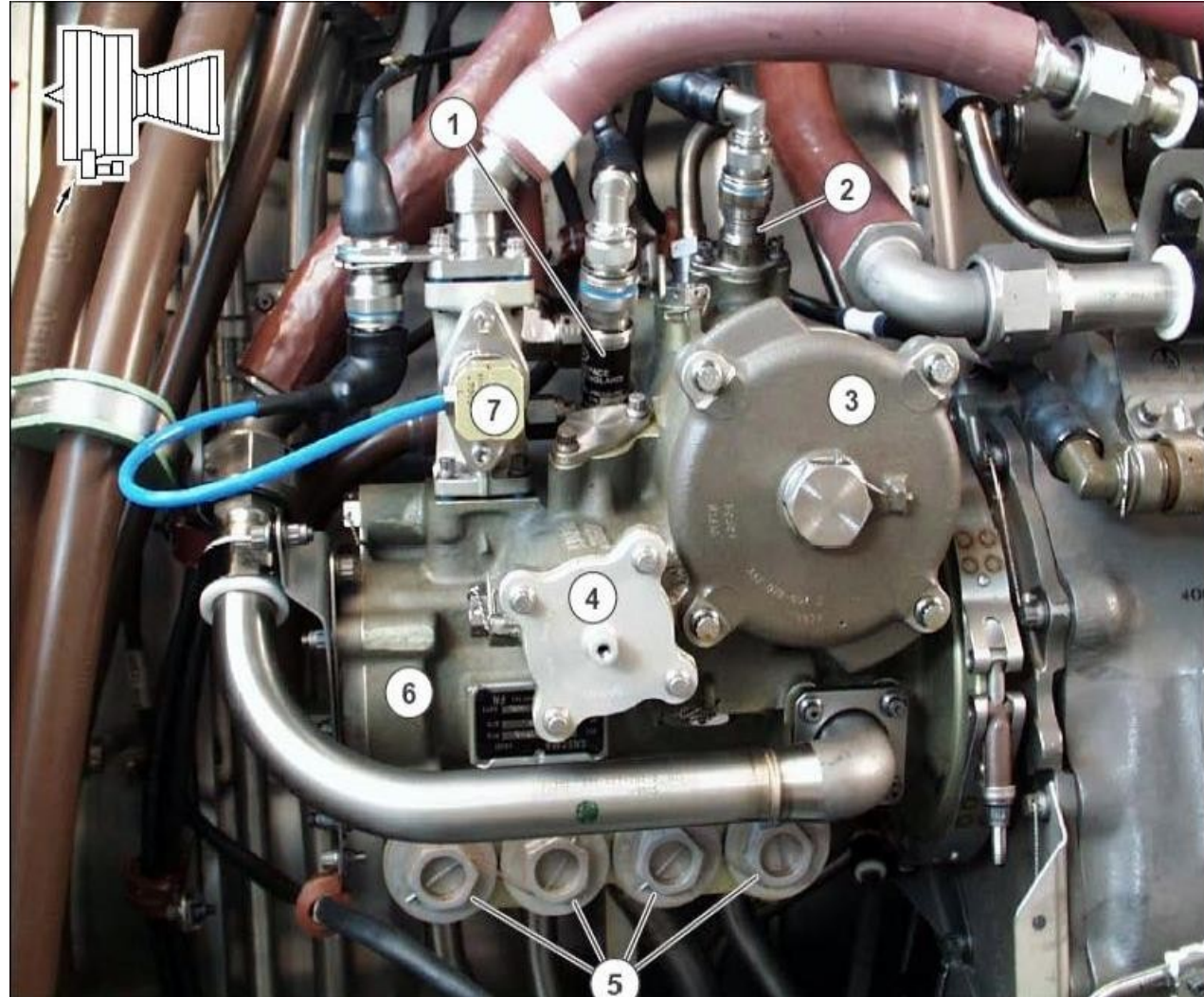
No.	Component
1	Pop-out indicator
2	Oil level transmitter
3	Oil gravity filler cap
4	Oil supply hose
5	Oil return hose
6	Oil tank vent hose



ENGINE OIL SYSTEM COMPONENTS



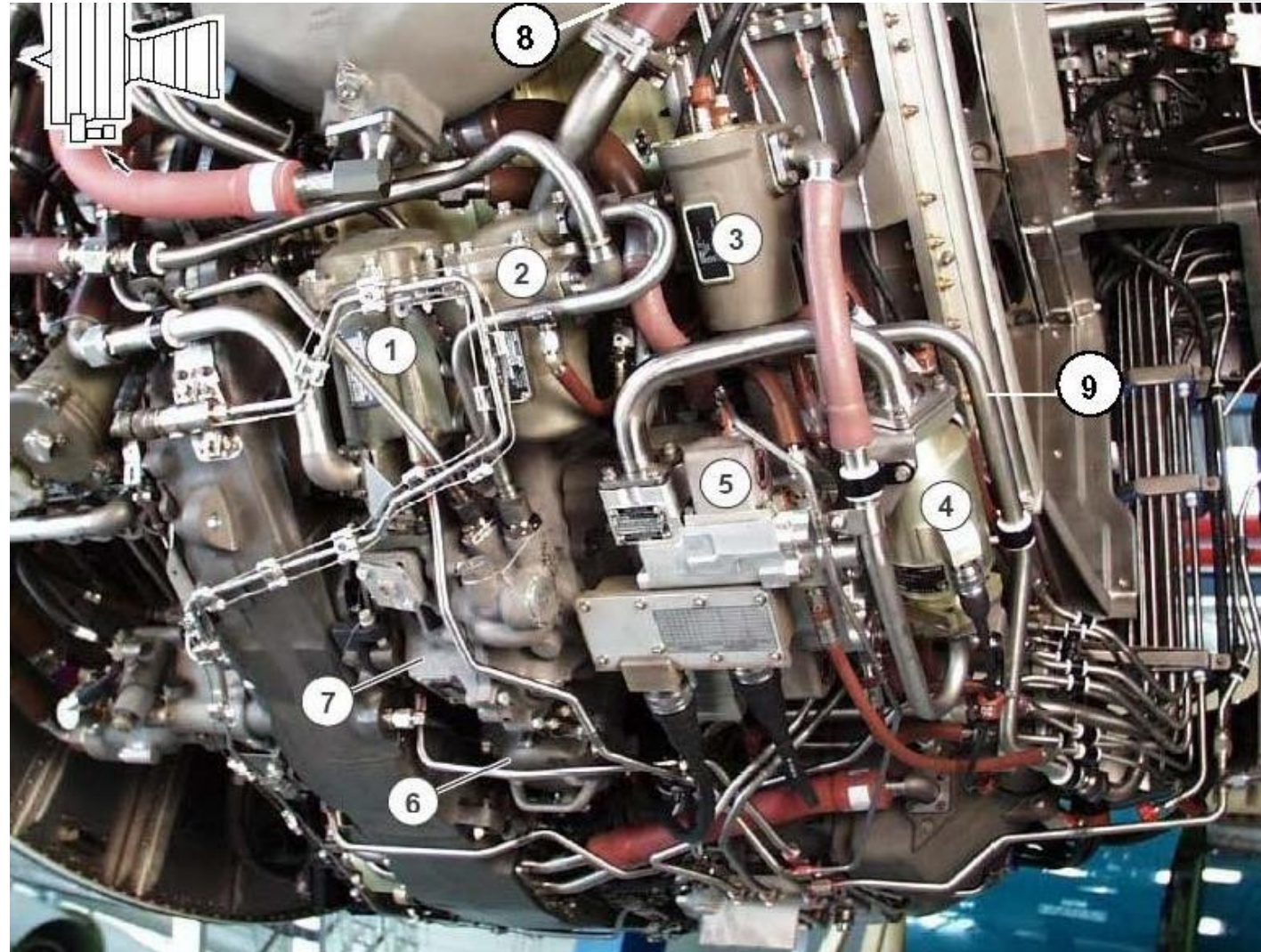
No.	Component
1	Oil filter differential pressure switch
2	Oil temperature sensor
3	Main supply filter
4	Backup filter
5	Scavenge screens
6	Lube unit
7	Master chip detector (MCD)



FUEL COMPONENTS



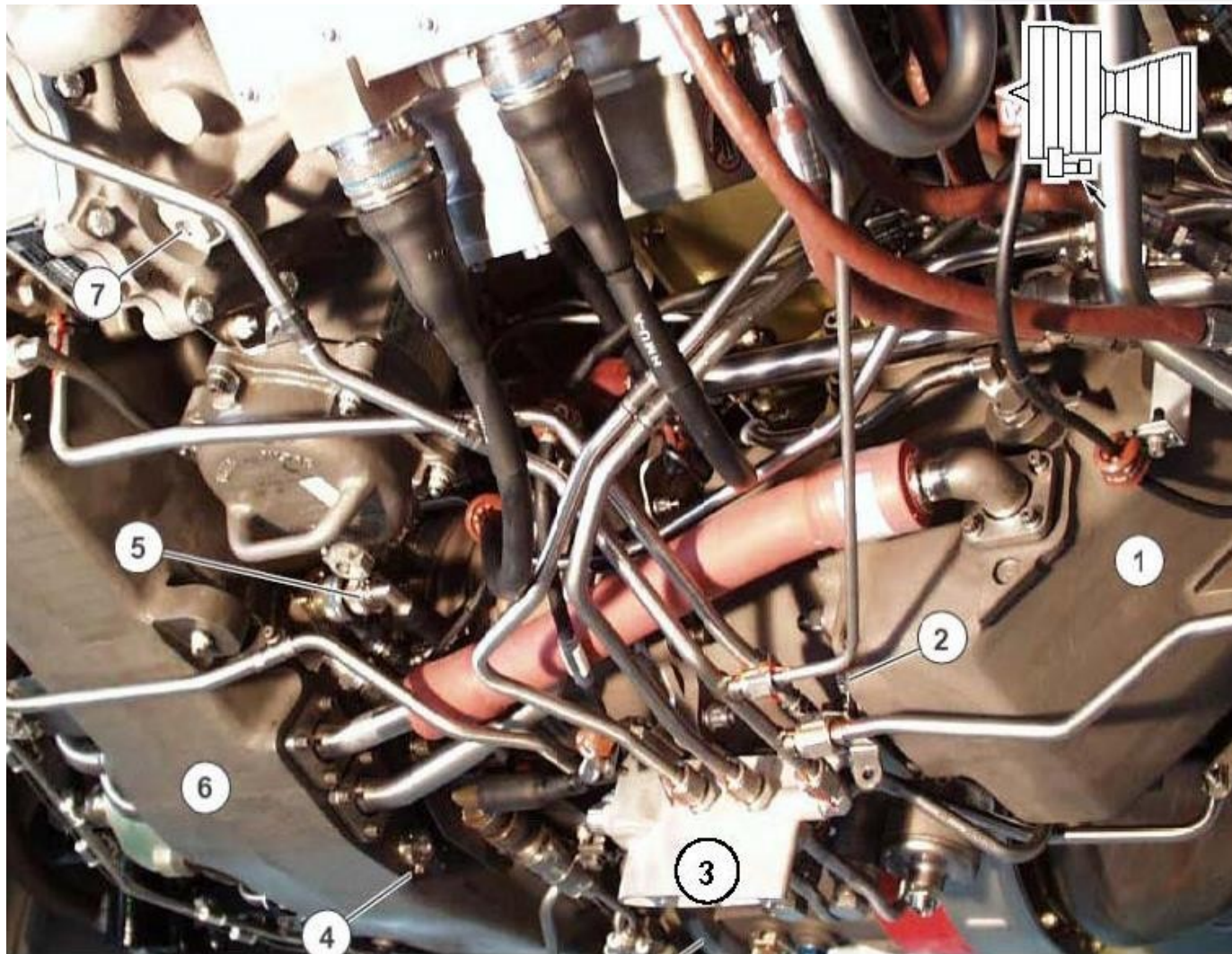
No.	Component
1	Main oil/fuel heat exchanger
2	Servo-fuel heater
3	Fuel nozzle filter
4	Fuel flow transmitter
5	Hydromechanical Unit (HMU)
6	Fuel filter cover
7	Fuel pump
8	Fuel supply hose
9	Fuel outlet tube



FAN CASE LEFT LOWER SIDE



No.	Component
1	Transfer gearbox (TGB)
2	TGB drain port
3	Drain module
4	AGB drain port
5	N2 speed sensor
6	Accessory gearbox (AGB)
7	Fuel pump inspection plug

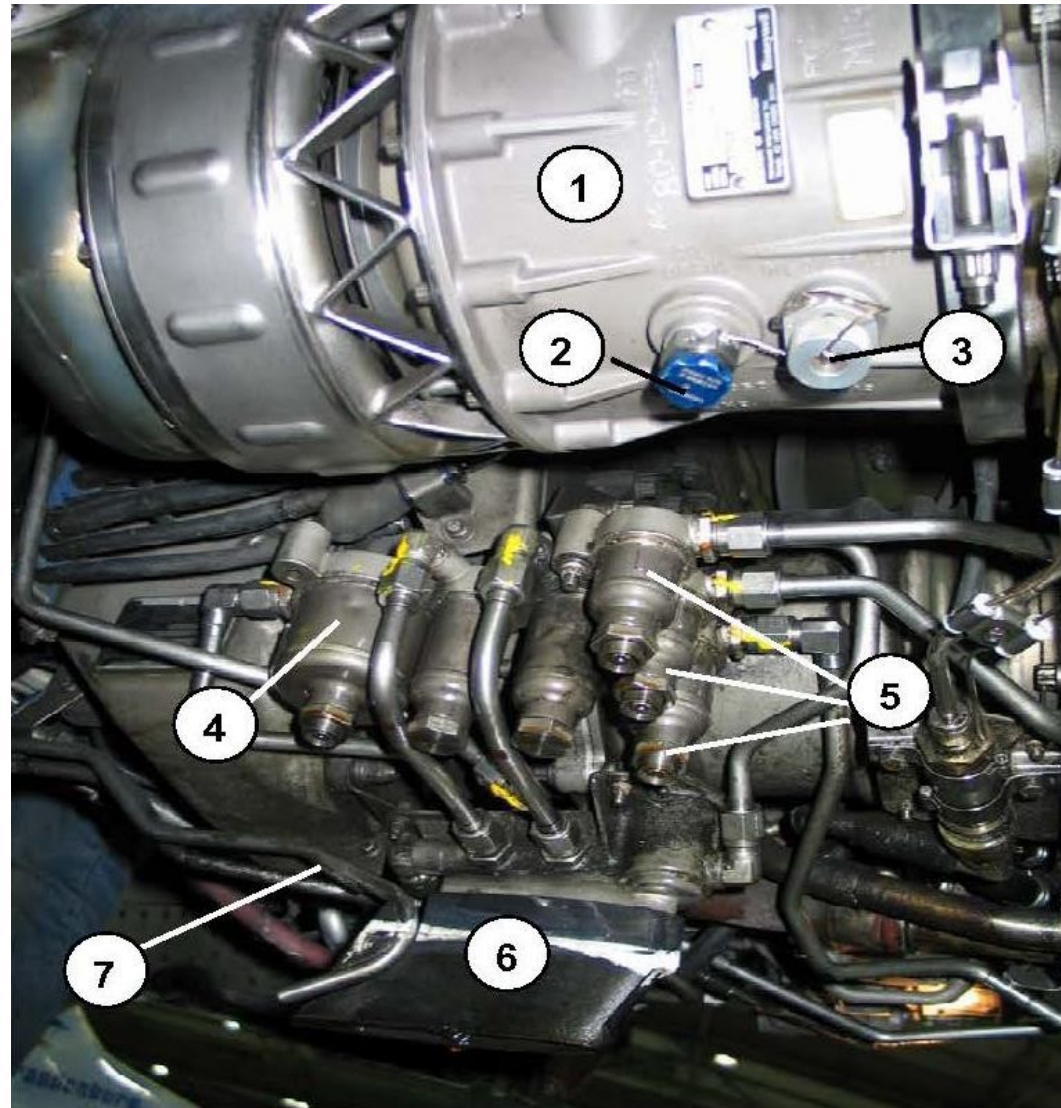


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LOWER ACCESSORY GEAR BOX



No.	Component
1	Starter
2	Starter drain port (with magnetic chip detector)
3	Starter overflow port
4	Fuel/oil holding tank
5	Drain collectors
6	Drain mast
7	Separate drain line

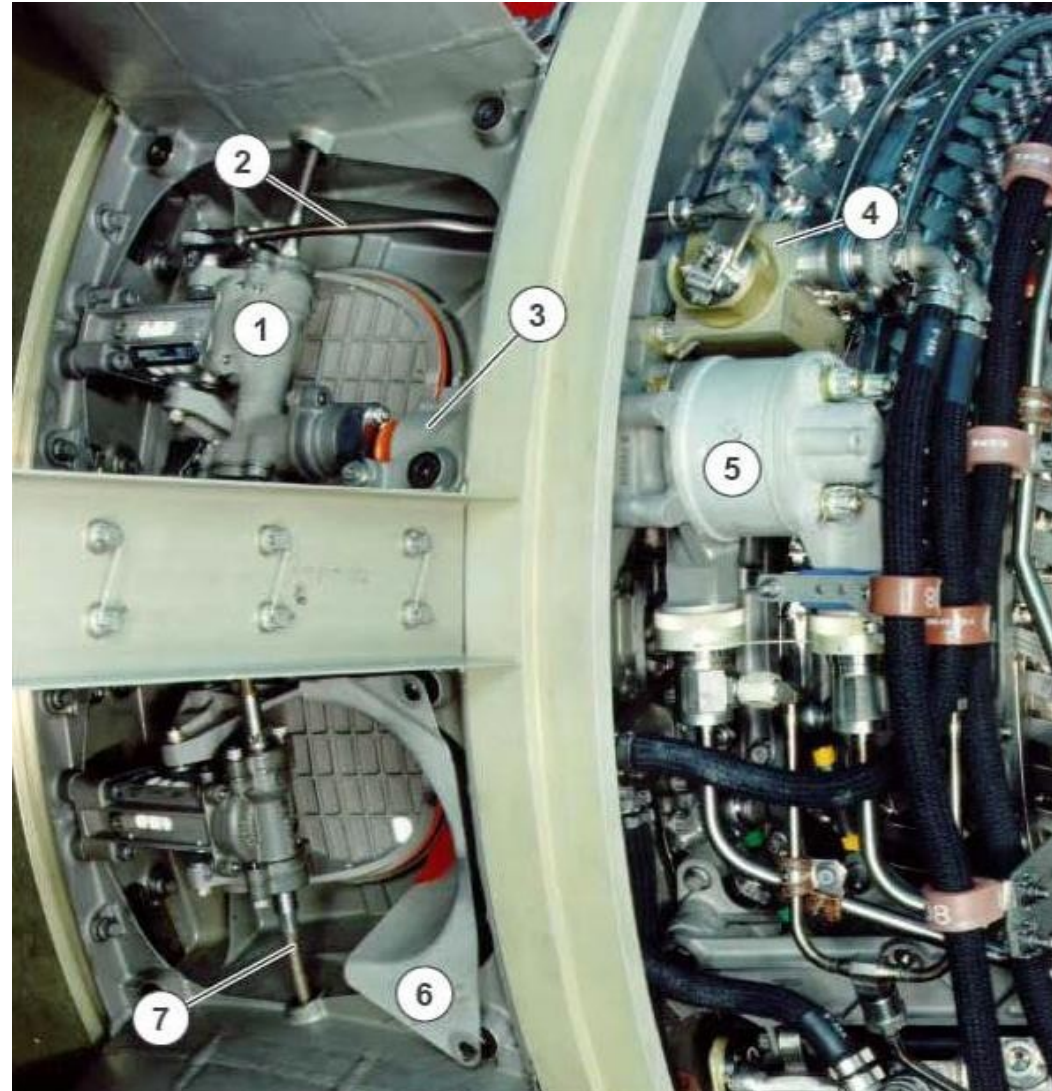


INTERMEDIATE CASING AIR CONT. COMPONENTS



No.	Component
-----	-----------

- | | |
|---|----------------------------|
| 1 | VBV master bleed valve |
| 2 | VBV feedback rod |
| 3 | VBV stop mechanism |
| 4 | VBV position sensor (RVDT) |
| 5 | VBV fuel gear motor |
| 6 | Slide |
| 7 | Flexible shafts |

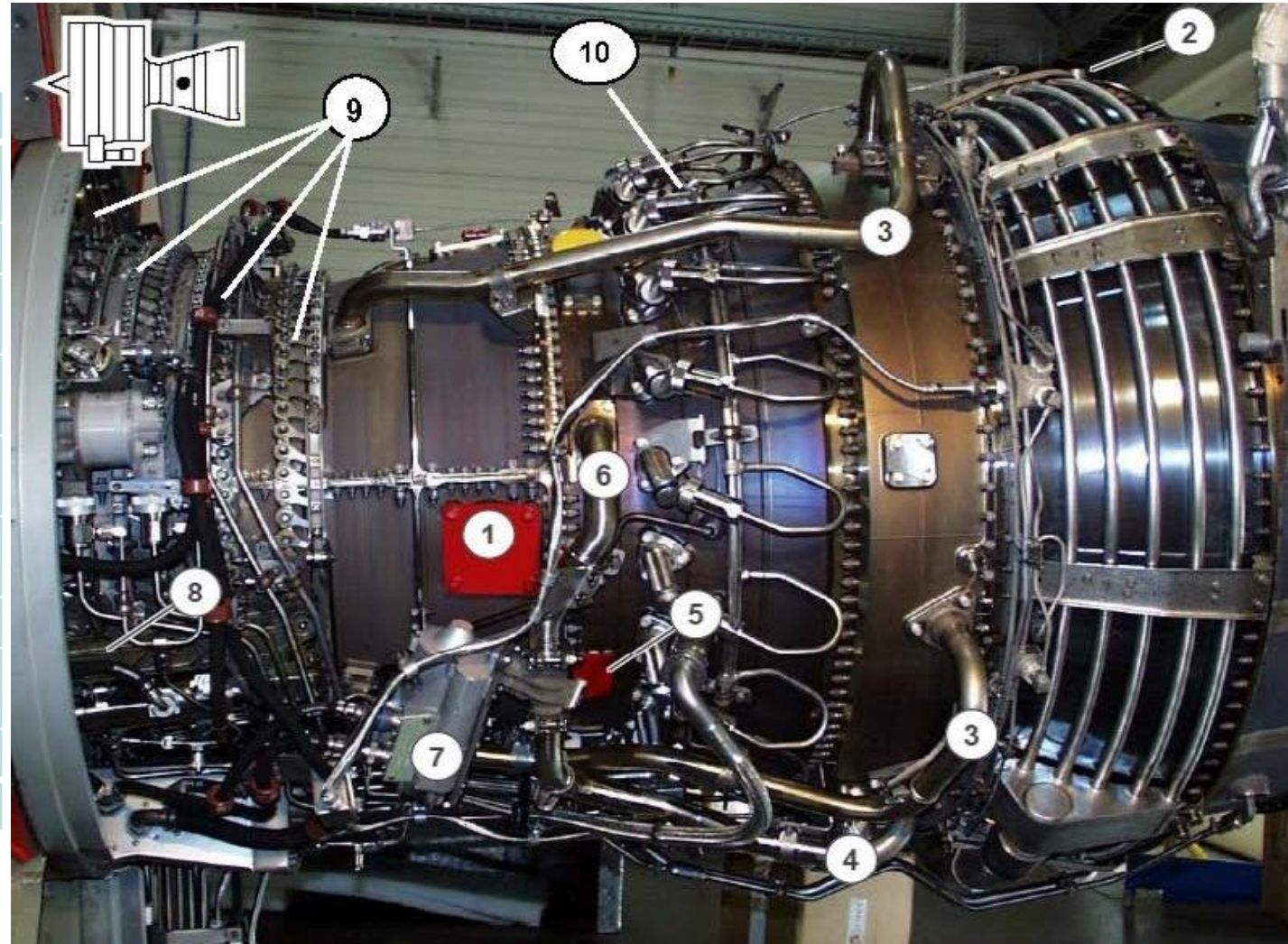


CORE ENGINE LEFT SIDE



No. Component

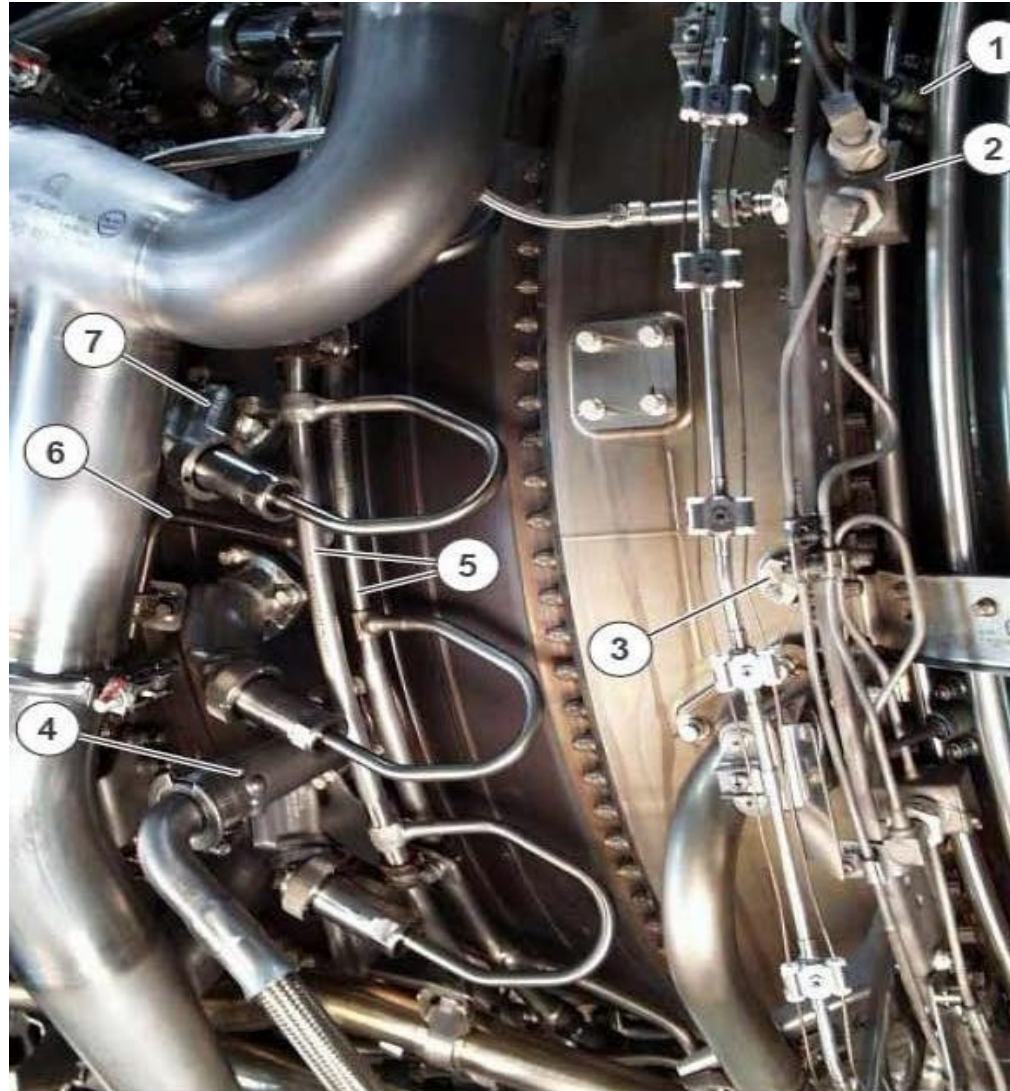
- | | |
|----|----------------------------------|
| 1 | 5th stage customer bleed port |
| 2 | TRF vibration sensor |
| 3 | LPT nozzle LH cooling air tubes |
| 4 | TBV 9th stage air discharge tube |
| 5 | 9th stage customer bleed port |
| 6 | 9th stage air supply tube to TBV |
| 7 | Transient Bleed Valve (TBV) |
| 8 | 8 o'clock VSV bellcrank assembly |
| 9 | VSV actuation rings |
| 10 | T3 sensor |



COMBUSTION CHAMBER AREA



No.	Component
1	EGT (T49,5) temperature sensor
2	EGT harness main junction box
3	HPT boroscope port
4	Igniter plug
5	Fuel manifolds (one staged, one unstaged)
6	P3 pressure tapping
7	Fuel nozzle



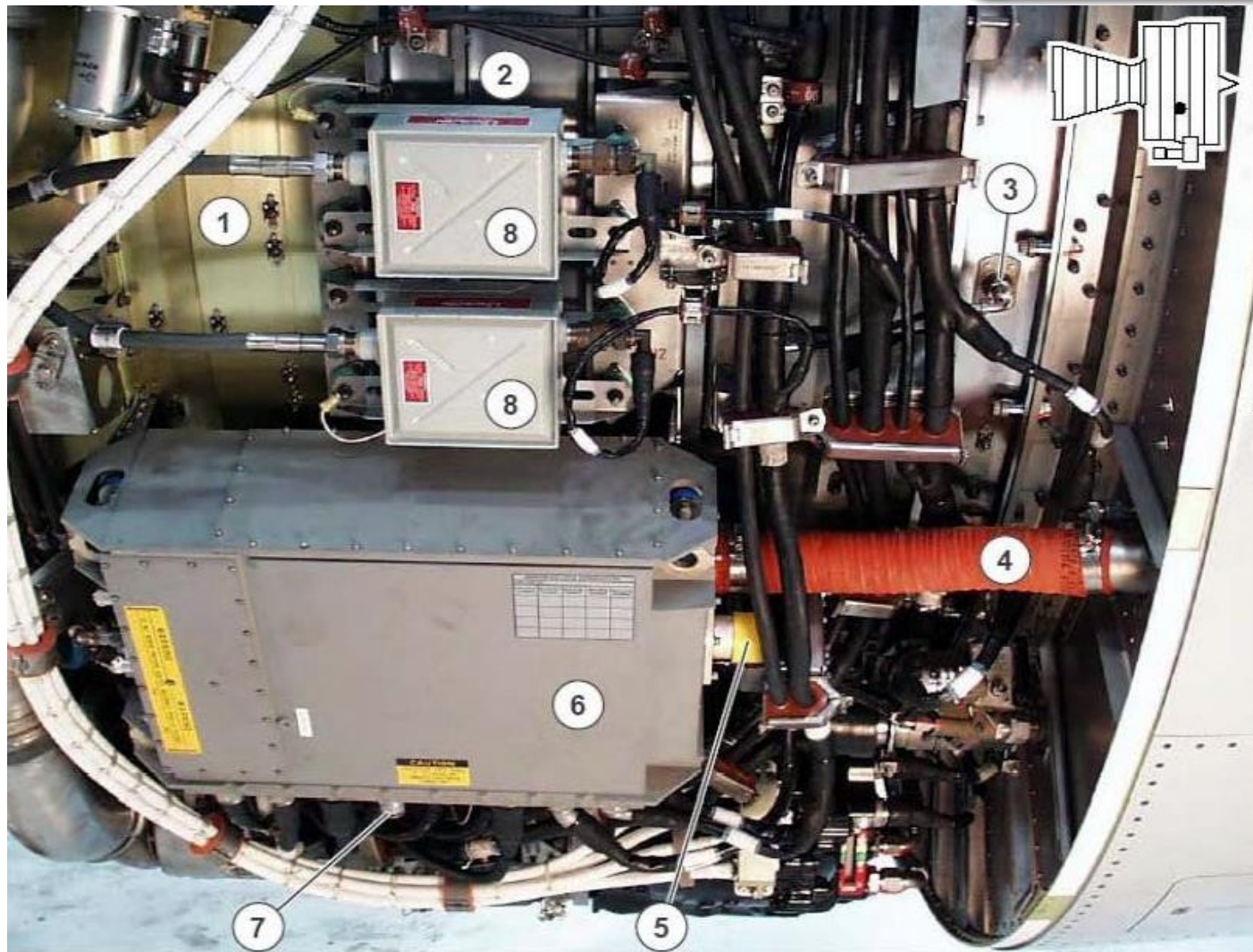
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ECU & IGNITION BOXES



No. Component

- | | |
|---|--------------------------------|
| 1 | Downstream fan inlet case |
| 2 | Upstream fan inlet case |
| 3 | P12 pressure tapping |
| 4 | ECU cooling inlet hose |
| 5 | ECU air outlet |
| 6 | Electronic Control Unit (ECU) |
| 7 | ECU engine identification plug |
| 8 | Ignition boxes |

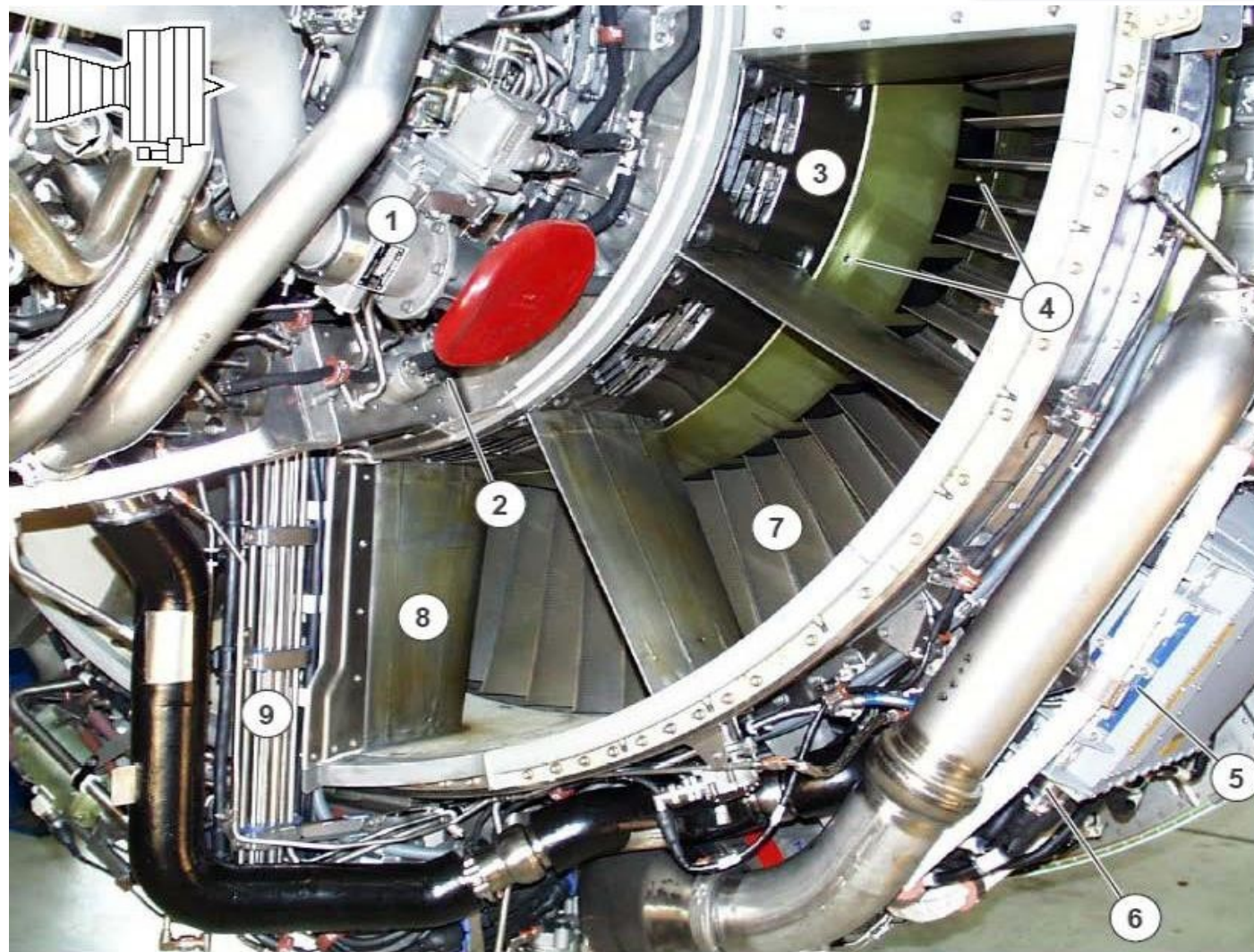


FAN DUCT LOWER RIGHT SIDE



No. Component

- | | |
|---|---------------------------|
| 1 | LPTACC valve |
| 2 | T25 electrical harness |
| 3 | Fan duct panels |
| 4 | Booster boroscope ports |
| 5 | ECU share plate |
| 6 | ECU electrical connectors |
| 7 | Outlet Guide Vanes (OGV) |
| 8 | Fan frame strut No.7 |
| 9 | 6 o'clock tube bundle |

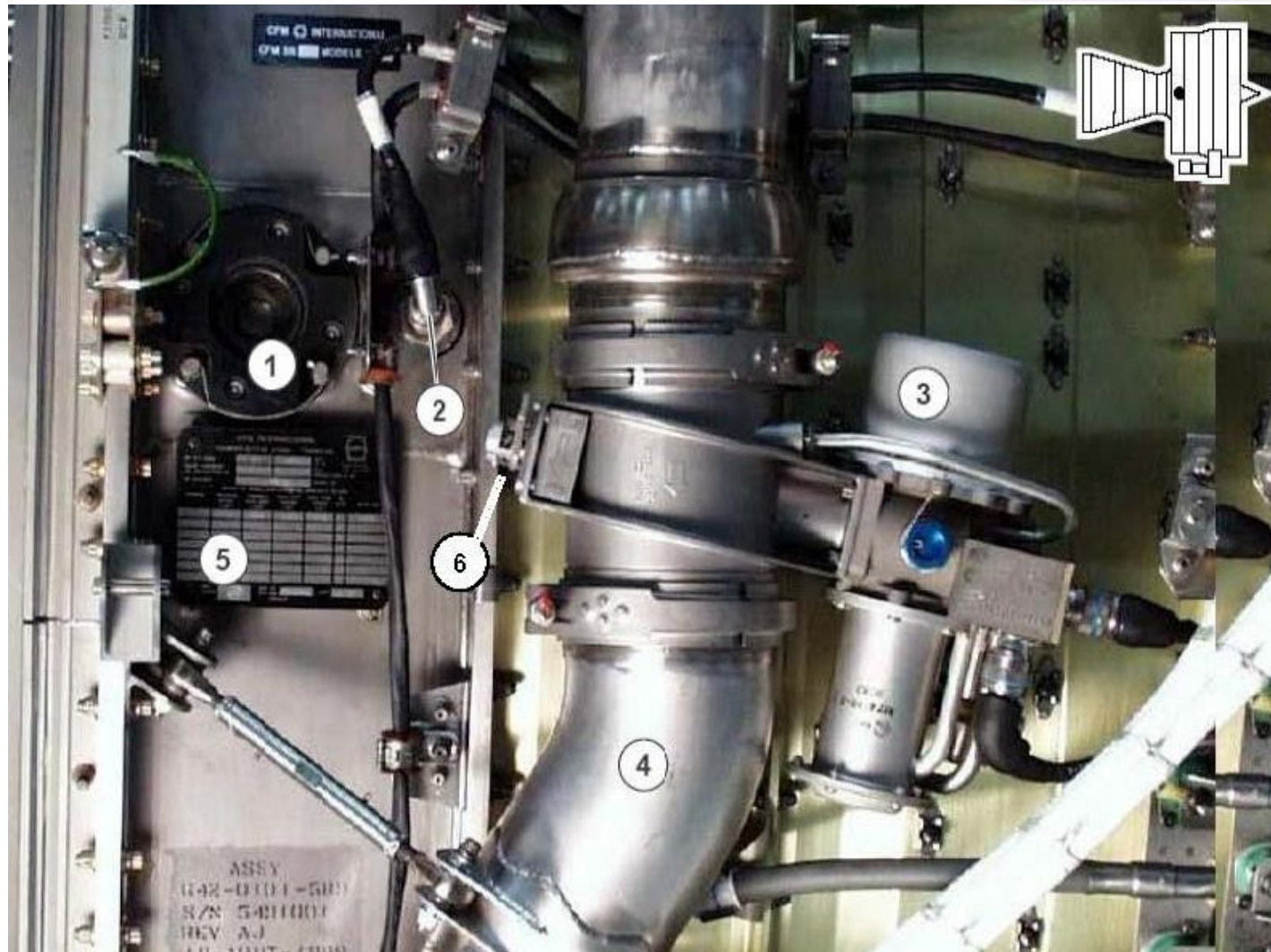


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FAN CASING RIGHT SIDE



No.	Component
1	Handling trunnion
2	No.1 bearing vibration sensor connection
3	Starter air valve
4	Air duct
5	Engine data plate
6	Starter manual override



AFT AGB LOWER RIGHT SIDE



No.	Component
1	Forward sump drain tube
2	N1 speed sensor
3	Starter overflow port
4	Starter drain port
5	Starter oil filling port
6	Starter



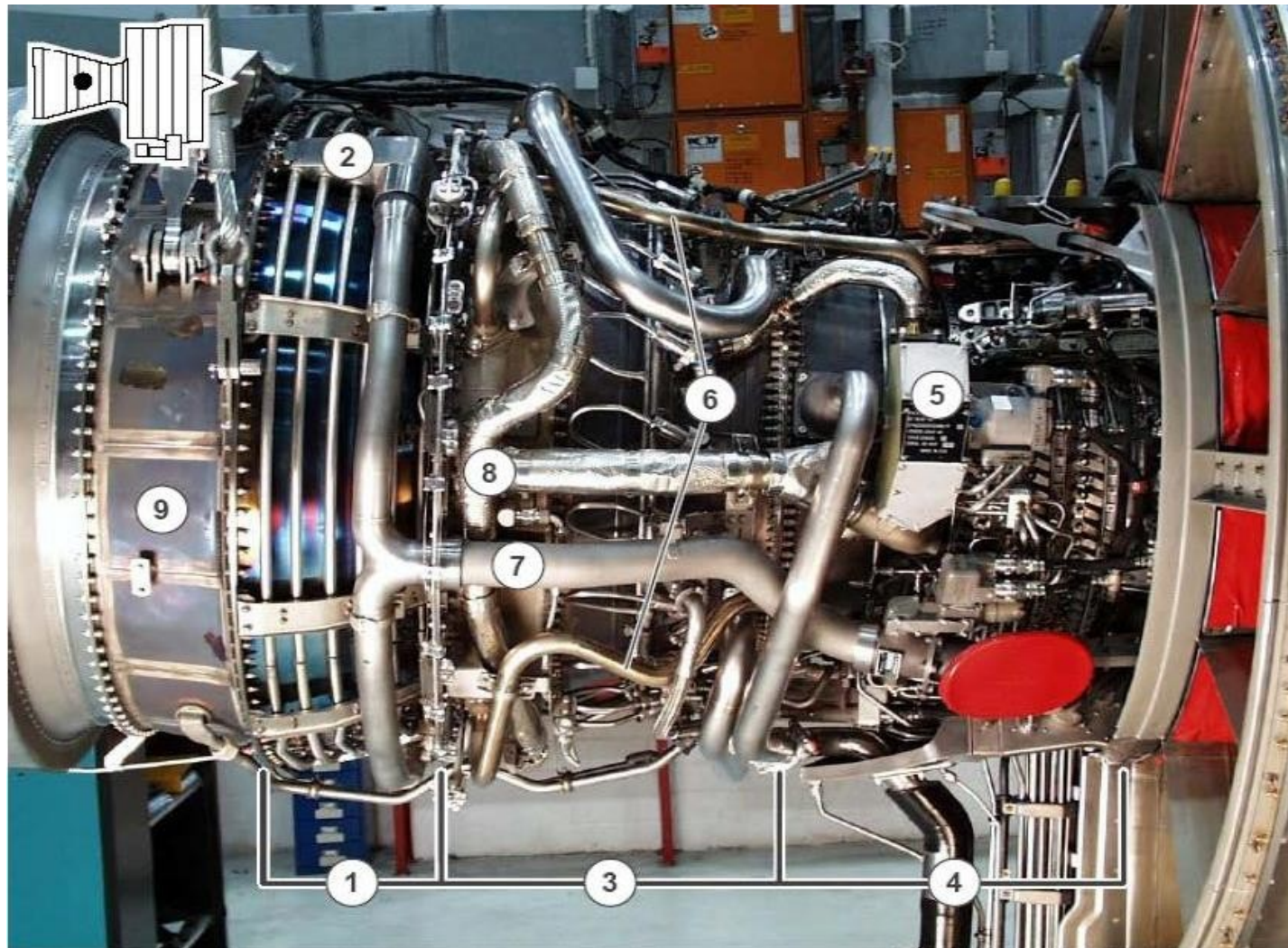
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CORE ENGINE RIGHT SIDE



No. Component

1	LPT case
2	LPT case cooling manifold (one of two)
3	Combustion case
4	Compressor front case
5	HPTACC valve
6	LPT nozzles RH cooling air tubes
7	LPTACC air manifold
8	HPTACC air manifold
9	Turbine rear frame (TRF)

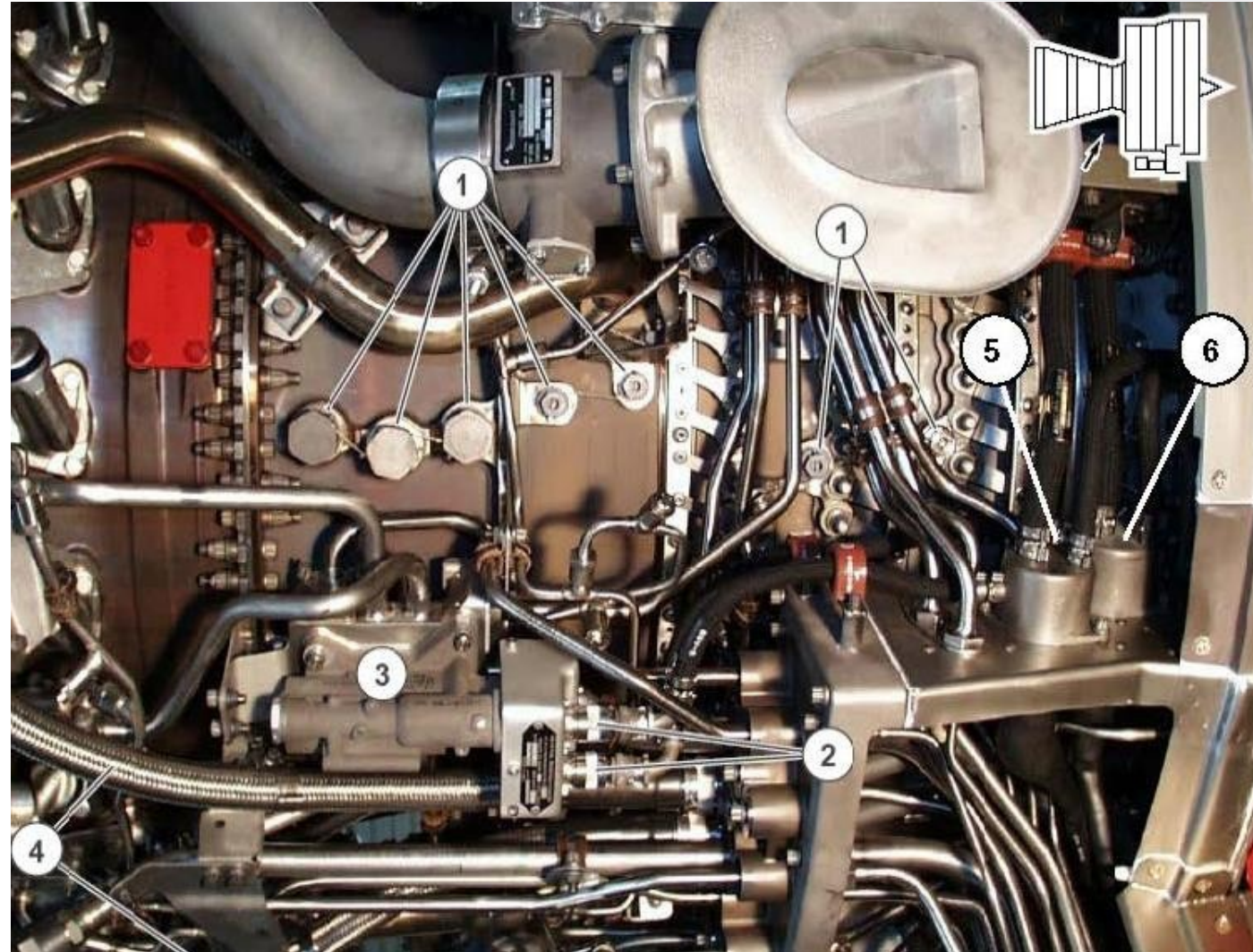


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CORE ENGINE RIGHT SIDE



No.	Component
1	HPC boroscope ports
2	BSV feedback connectors
3	Burner Staging Valve (BSV)
4	Ignition leads
5	T25 electrical harness
6	P25 electrical harness

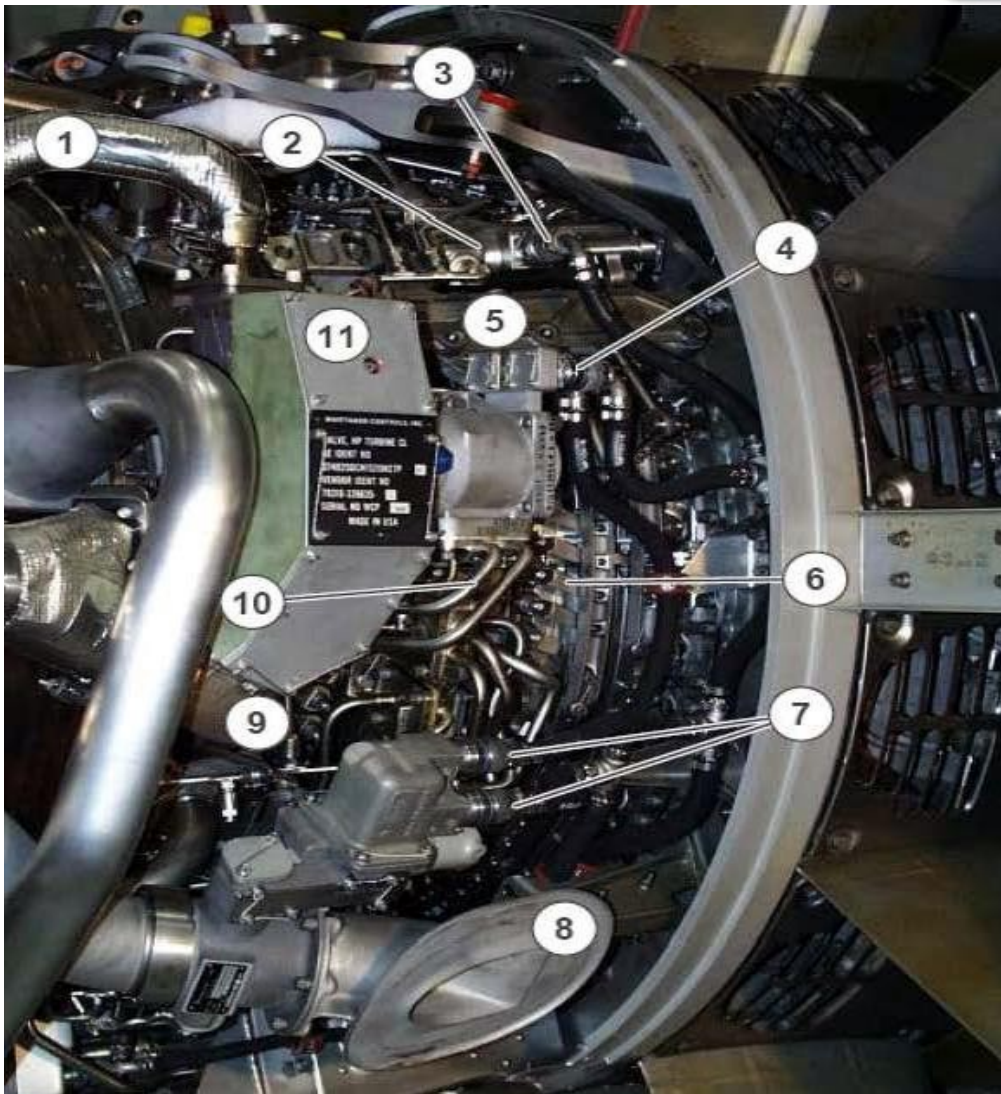


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CORE ENGINE RIGHT SIDE

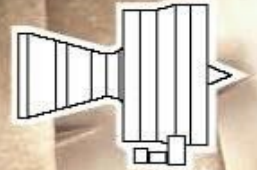


No.	Component
1	HPTACC valve 9 th stage air inlet
2	VSV actuator
3	VSV actuator electrical connector
4	HPTACC electrical actuator
5	2 o'clock VSV bellcrank assembly
6	VSV actuation ring and levers
7	LPTACC electrical connectors
8	LPTACC air scoop
9	HPTACC valve 4 th stage air inlet
10	HPTACC fuel manifold
11	HPTACC valve visual indicator

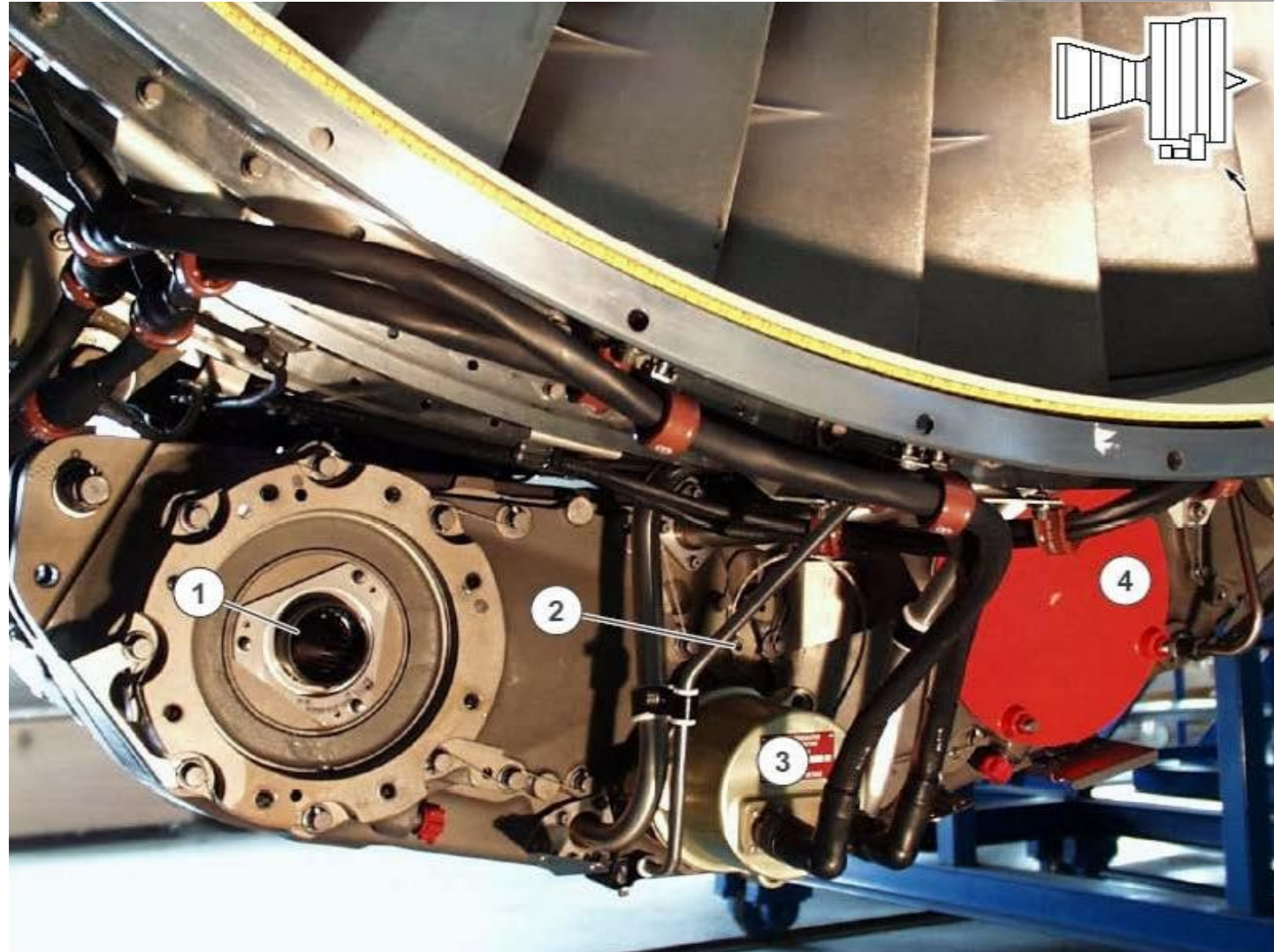


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AGB LOWER RIGHT SIDE



No.	Component
1	IDG pad
2	Handcranking pad
3	Control alternator (PMA)
4	EDP hydraulic pump pad



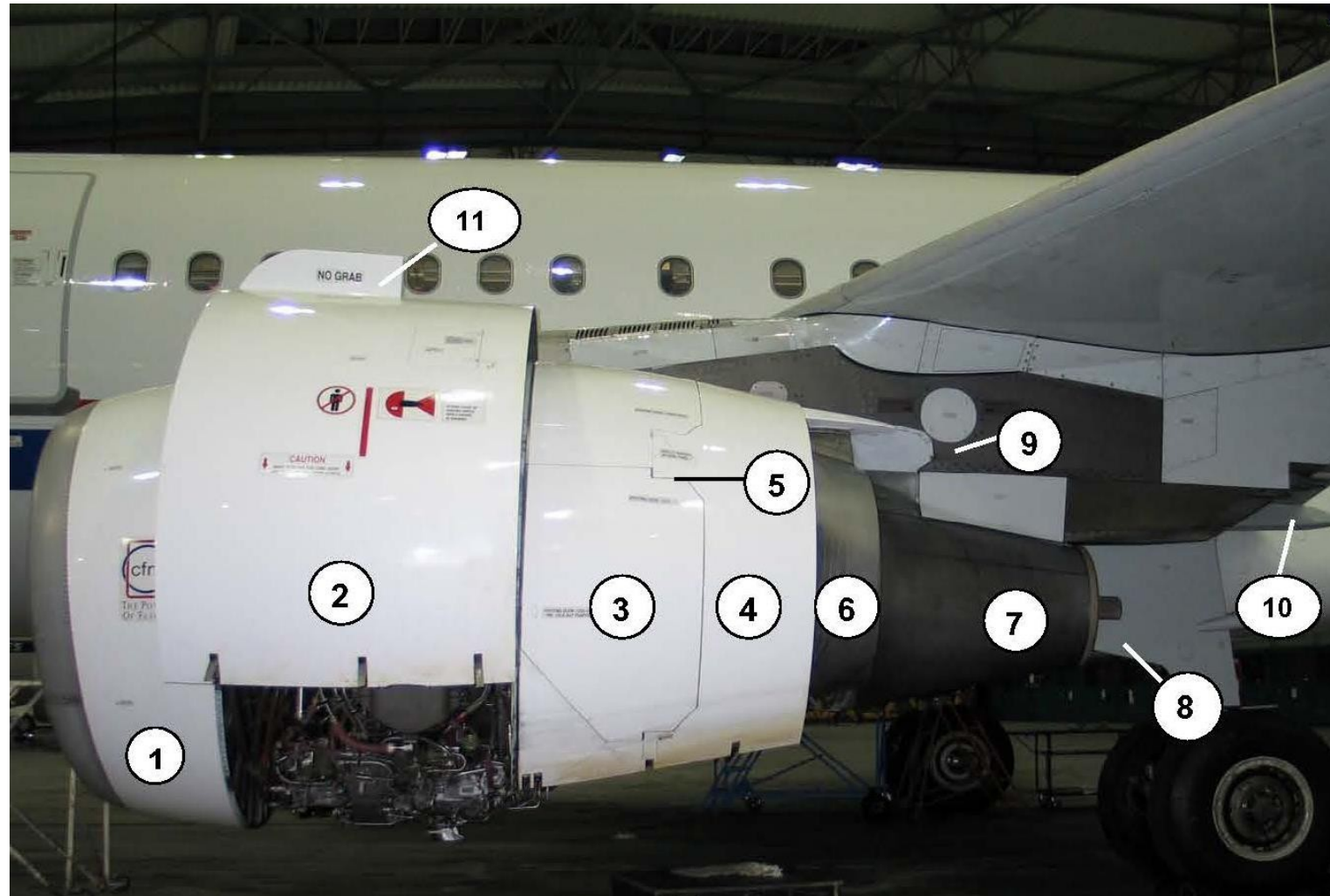
ENGINE AFT VIEW



No.	Component
1	Flame arrestor
2	Rear sump oil drain port
3	Rear sump oil scavenge tube
4	Outer case drain hole
5	Rear sump oil supply tube
6	TRF rear flange
7	Exhaust plug studs

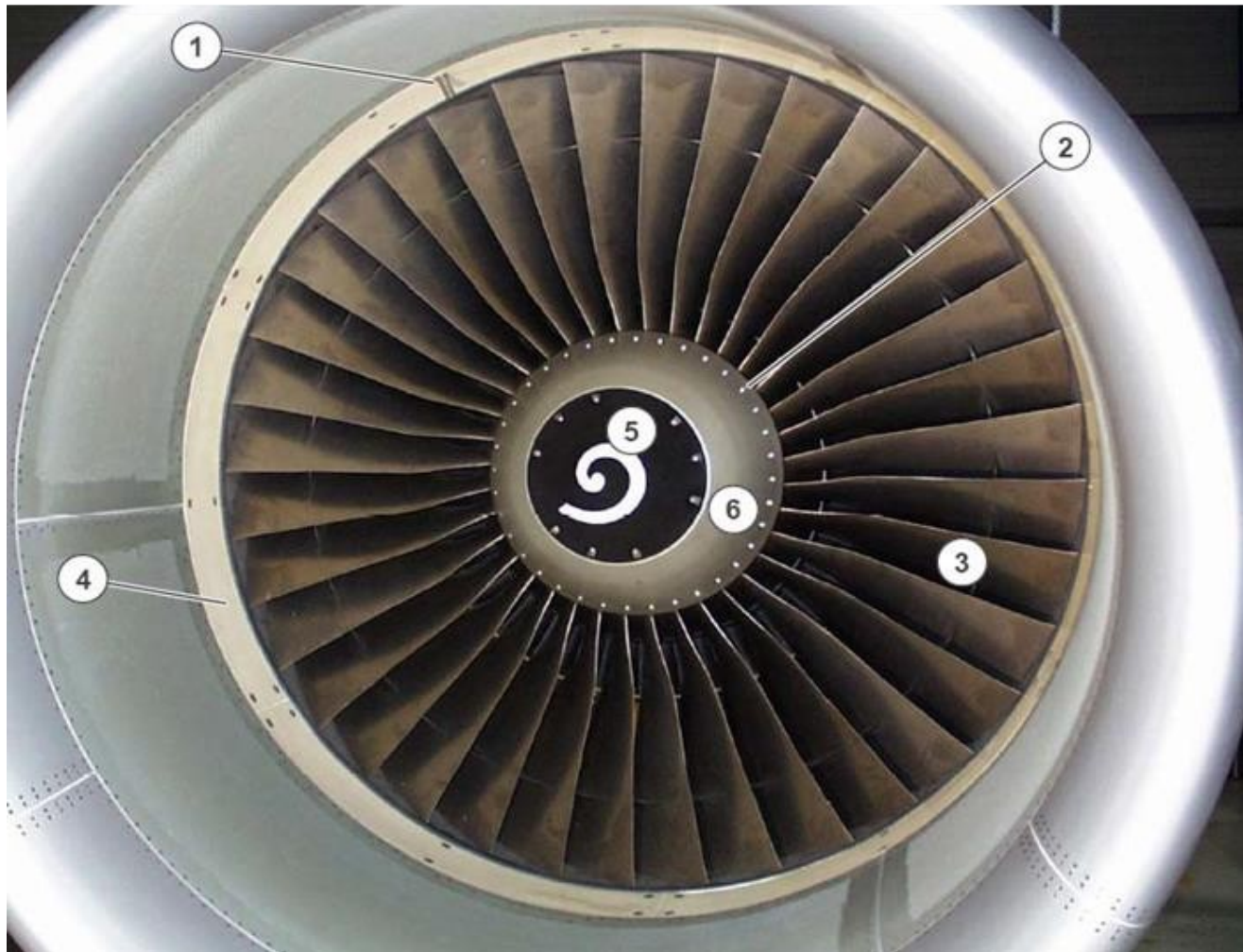


ENGINE COWLS



No.	Component
1	Air Inlet Cowl
2	Fan Cowl
3	Reverser door
4	Thrust Reverser Cowl
5	Deploy switches
6	Secondary Nozzle
7	Primary Nozzle
8	Centerbody
9	Fire Extinguishing Bottle door
10	Pylon Drain
11	Strake

INTAKE COWL FWD VIEW

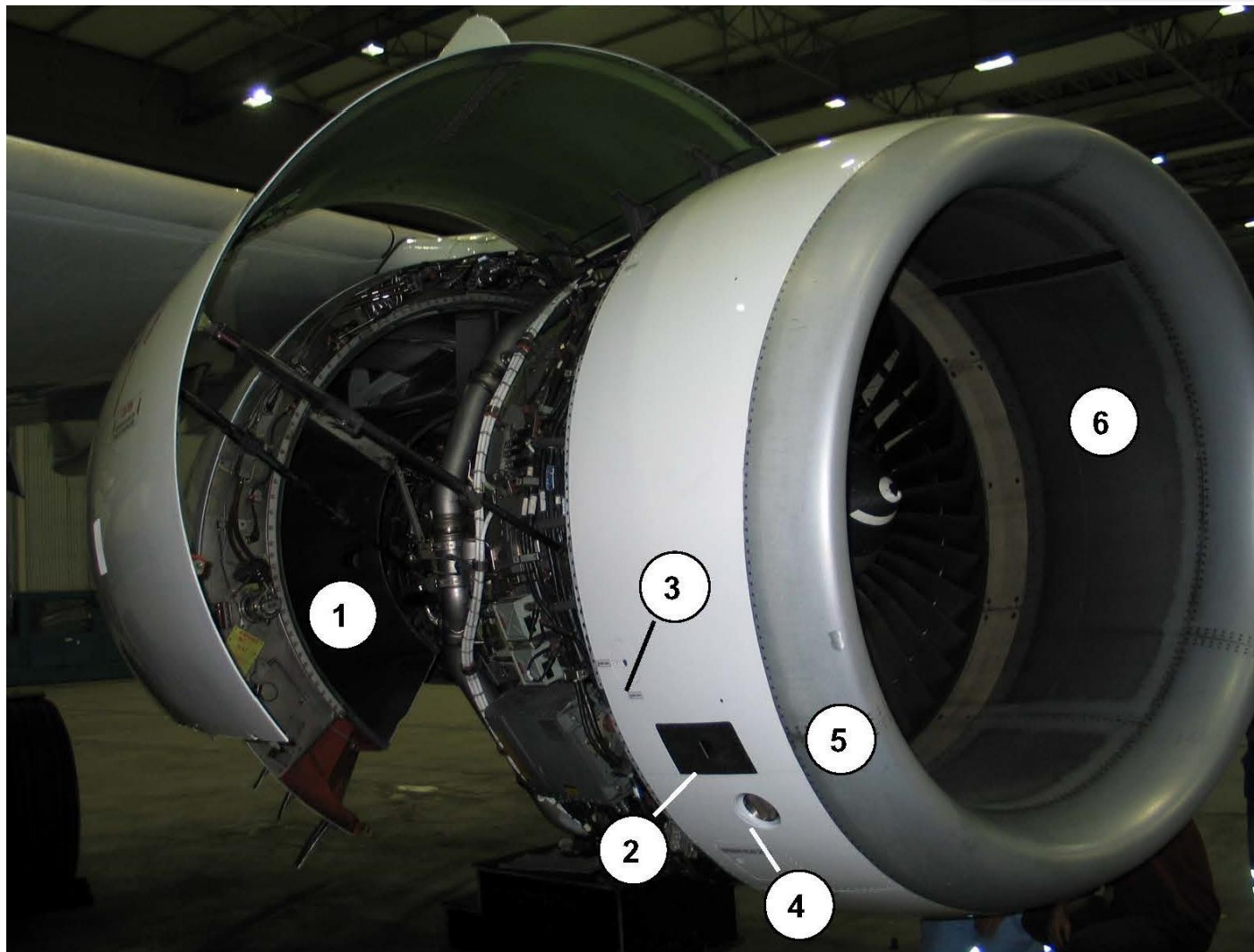


No.	Component
1	T12 sensor
2	Balancing screws
3	Fan blades
4	Fan forward acoustical panels
5	Spinner front Cone
6	Spinner rear Cone

ENGINE COWLS



No.	Component
1	Secondary airflow
2	ECU air cooling inlet
3	Interphone jack
4	Anti-ice air discharge
5	Anti-ice air intake leading edge
6	Air inlet inner barrel with acoustical panels



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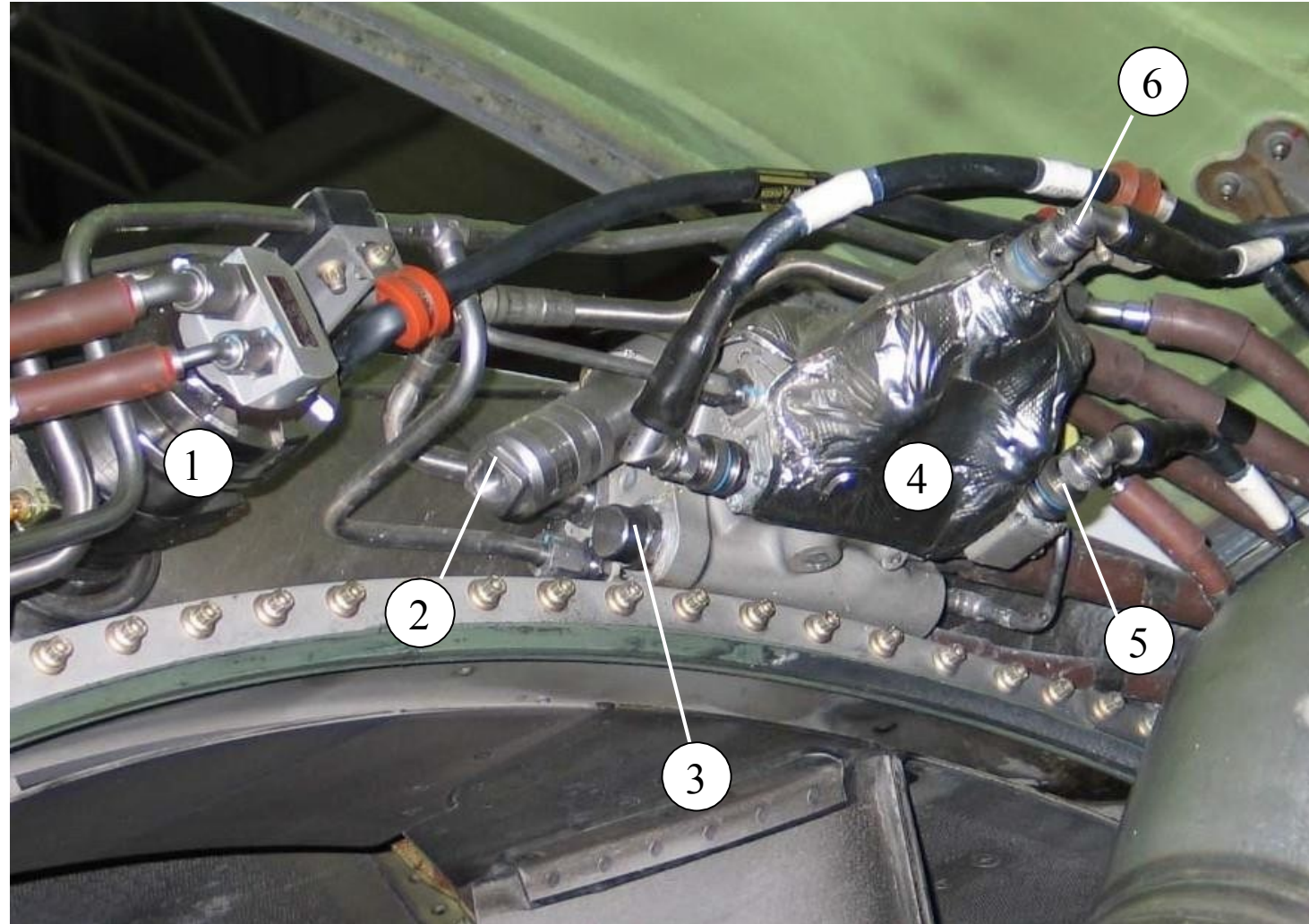
ENGINE COMPONENTS



THRUST REVERSER COMPONENTS



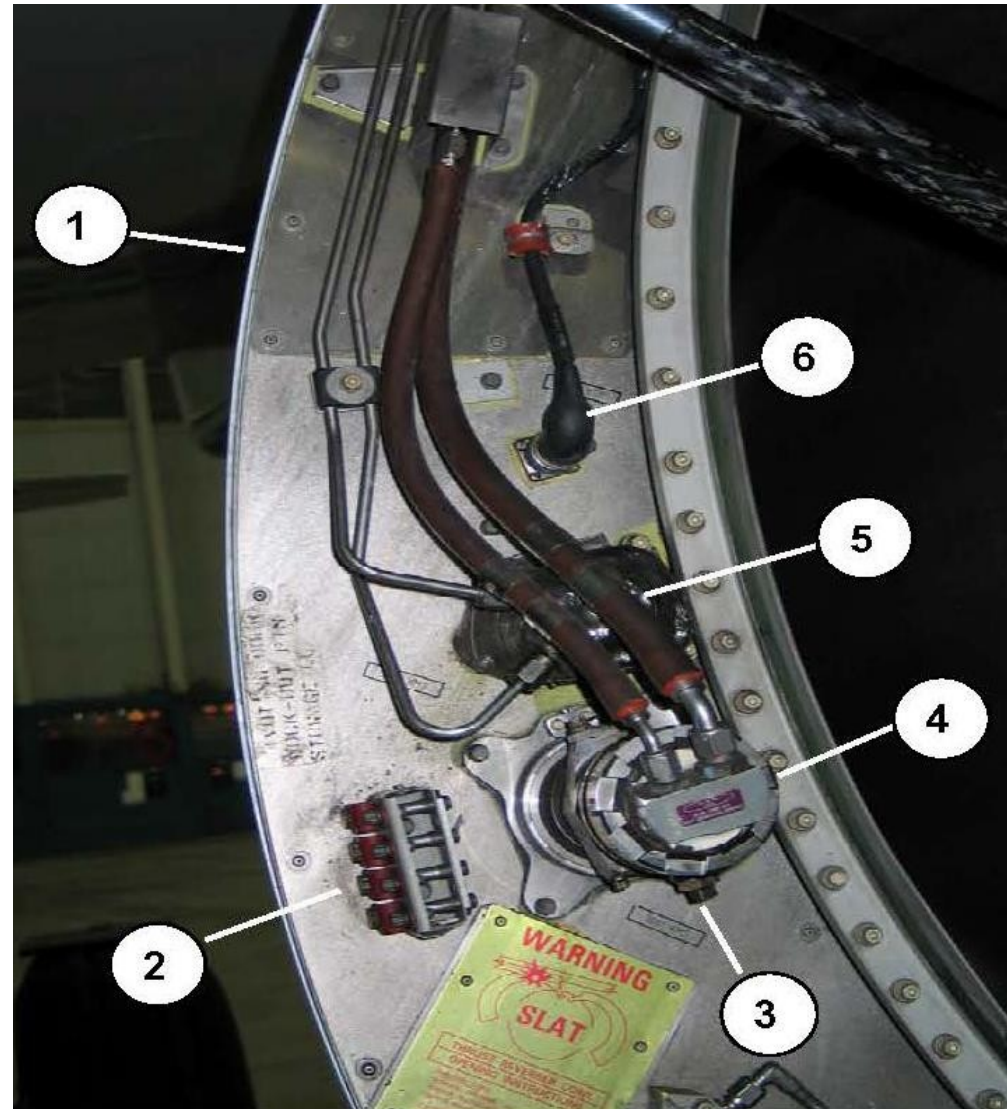
No.	Component
1	Reverser door actuator
2	HCU hydraulic filter
3	Flow limiter
4	Hydraulic Control unit (HCU)
5	HCU Pressurizing valve solenoid
6	HCU Directional valve solenoid



THRUST REVERSER COMPONENTS



No.	Component
1	Thrust Reverser Cowl
2	Reverser door Lockout bolts
3	Manual unlocking square
4	Reverser door actuator
5	Reverser door latch
6	Stow switch

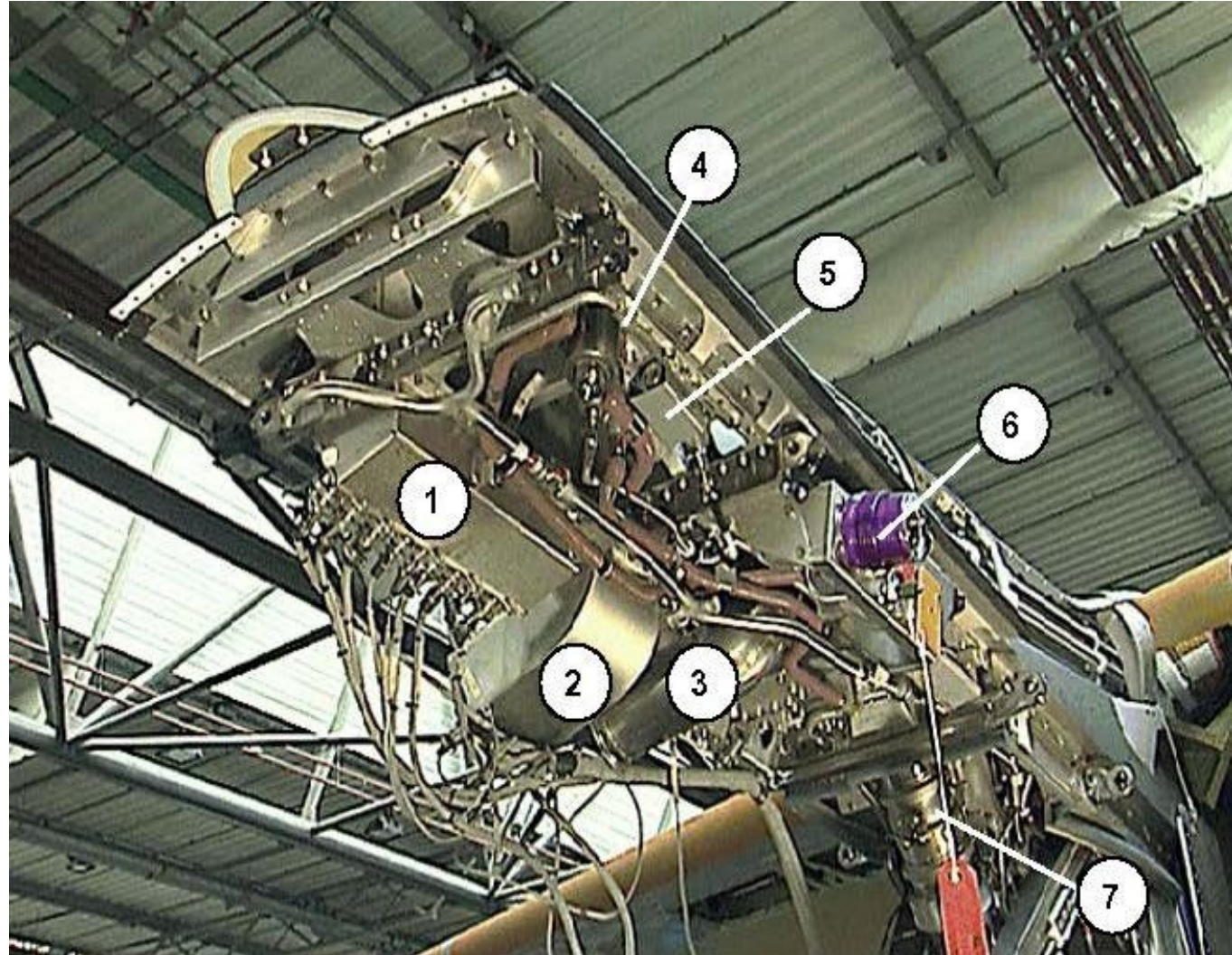


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PYLON COMPONENTS



No.	Component
1	Pylon - Engine electrical junction box
2	Fan electrical feeder box
3	Precooler Fan air cooling duct
4	Reverser hydraulic filter
5	Reverser S/O valve
6	Pylon - Engine fluid connections
7	Bleed overpressure valve

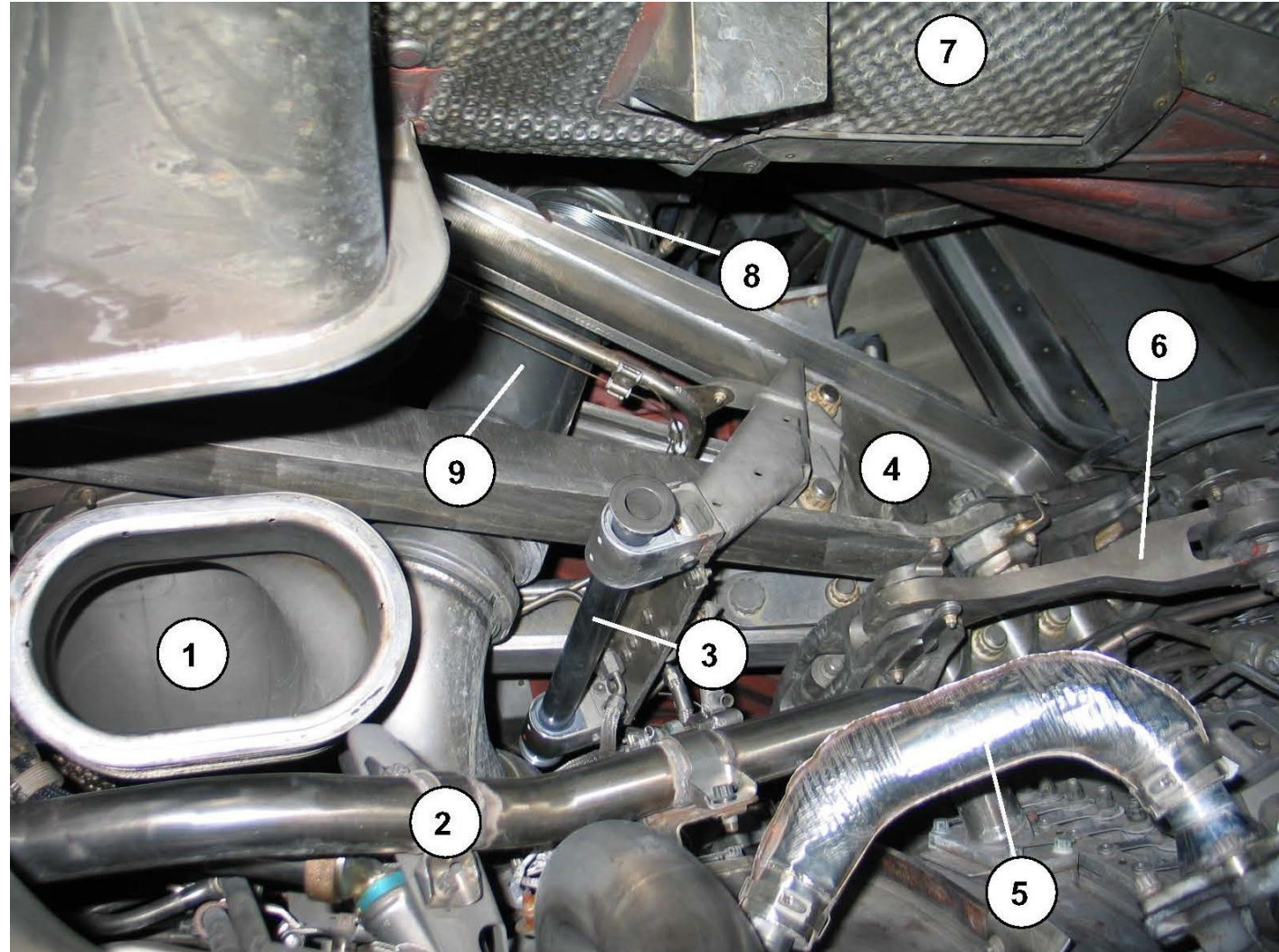


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INSIDE PYLON COMPONENTS



No.	Component
1	Precooler Fan air cooling duct
2	LPT nozzles RH cooling air tubes
3	Reverser cowls mechanical stops
4	Pylon Forward mount part
5	HPTACC 9 th stage air inlet
6	Thrust link assembly
7	Thrust reverser cowl
8	Bleed overpressure valve
9	Engine bleed duct



ENGINE AFT MOUNT TO PYLON



No.	Component
1	AFT mount
2	LPT cooling manifold
3	LPT frame

